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ABSTRACT

Contrary to earlier views, studies show that preschool children with conduct problems will likely continue to exhibit some maladjustment in adolescence and adulthood. A high rate of aggression and noncompliance in toddlers can be predictive of serious antisocial problems later in life, if not treated. Interventions aimed at changing the disruptive behavior for a wide range of family circumstances should focus on modifying the sources of influence affecting the development of antisocial behavior. The components of such a multimodal intervention program are: (1) the relationship between child and caregiver; (2) factors within the child; (3) factors within the caregiver; and (4) factors in the larger social context. (AS)

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INTERVENTION PROGRAM

FOR PRESCHOOL-AGE CHILDREN AT RISK

FOR CONDUCT DISORDER AND ANTISOCIAL BEHAVIOUR

May 1996

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Early onset of conduct problems linked to later antisocial behaviour

Disturbances of conduct are a major clinical problem for school-age children and represent perhaps the most substantial health problem faced by this age group. Epidemiological studies suggest that conduct problems are the most frequently occurring disorders, representing 4-12% of school-age children in the general population (Baum, 1989:175). These behavioral problems receive the highest rates of referral to mental health facilities, representing 1/3 to 2/3 of child referrals (Baum, 1989:175; APA, 1994:88). As well a significant proportion of these children will continue to exhibit some form of maladjustment in adolescence and adulthood (Baum, 1989:189) and "go on to parent the next generation of antisocial children" (Tremblay et al, 1994:1). Moffitt (1993:678), for example, suggests that there are virtually no adults with Antisocial Personality Disorder who did not also have Conduct Disorder as school-age children.

Conduct problems therefore constitute a major drain on resources in the mental health and justice systems (Baum, 1989:171). Moreover the prevalence of these problems seems to be increasing, creating a need for service that far exceeds available resources and personnel (Webster-Stratton & Dahl, 1995:333) [1]. Many professionals also acknowledge their limited ability to turn around youngsters once their antisocial behaviour has become serious (Tremblay et al, in press:1; Moffitt, 1993:684; Loeber, 1990:3) and it has been suggested that aggressive behaviour "crystallizes" and becomes more stable around eight years of age (Tremblay et al, in press:2; Loeber, 1991:395).

Given the costs of antisocial behaviour, its continuity, the literature on crystallization and the lack of treatment success, it would appear useful to "establish the earliest age at which such conduct problems become predictive, so that preventive efforts can take place while the problems are not yet firmly established" (White et al, 1990:508) [2]. Surprisingly very little attention has been paid to possible preschool age precursors of later antisocial behaviour (Tremblay et al, in press:1; Campbell, 1990:66). This oversight is probably in part due to an earlier view that behavioral difficulties in toddlers and preschoolers were relatively insignificant and continuity of behaviour did not extend to the preschool age (Campbell, 1990:204). Contrary to this earlier view the results that are starting to accumulate, particularly from prospective, longitudinal studies, suggest that a high rate of aggression and noncompliance, in children as young as 3, if untreated is fairly stable over time and predictive of later serious problems [3].

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1 One study suggests that fewer than 10% of children who need mental health services actually receive them (Hobbs, 1982:8).

2 Barnett & Escobar (1990) provide a useful treatment of cost/benefit notions in early intervention.

3 It has been reported for example that 67% of children with externalizing problems at age 3 continued to be aggressive at age 8 (Webster-Stratton & Dahl, 1995:338) and in an important 20 year cohort study in New Zealand notable continuity has been found from disobedient and aggressive behaviour at age 3 to a later childhood diagnosis of Conduct Disorder and thence to arrest by police in the early teen years (White et al, 1990). Haapasalo & Tremlay (1994:1044) provide a list of other longitudinal studies

One review of the literature has suggested a 50:50 chance for continuity of problems when the symptoms occur in the preschool years and are severe (Landry et al, in press:1). It is starting to appear that the primary developmental pathway for serious conduct disorders in adolescence and adulthood is set in the preschool period. Adolescents who are most likely to be chronically antisocial are those who first evidenced disturbances of conduct in the preschool years (Webster-Stratton & Dahl, 1995:336). There appears to be a progression in what Moffitt (1993:684) has described as "over the years, slowly and insidiously constructing an antisocial personality". It has been suggested that high-rate, less severe forms of antisocial behaviour, such as noncompliance, often precede more severe forms. This training in aggression also appears to progress from overt to covert types of conduct-disordered behaviour and from problems within the home setting to problems in the school and community (King & Noshpitz, 1991:411; Baum, 1989:189; McMahon & Forehand, 1988:108). It has further been suggested that one of the reasons this behaviour is maintained and strengthened is that children with poor self-control and aggressive behaviour are often rejected by peers and adults. Thus they are more likely to miss out on opportunities to acquire and practice prosocial alternatives, therefore increasing the risk of becoming life-course persistent anti-social (Moffitt, 1993:683).

Early onset of conduct problems linked to poor family management

There are a number of family management problems that can adversely affect young children. We have only begun to identify these faulty interactional processes but the majority of researchers have concluded that the quality of the caregiver-child relationship is one of the most important determinants in the etiology of conduct problems (Landry et al, in press:3; Webster-Stratton & Dahl, 1995:341; Loeber, 1991:395; Gallagher, 1990:543). Campbell (1990:78), for example, has noted that continuity in preschool conduct problems is particularly high in the context of a conflicted and negative caregiver-child relationship. Studies reveal that the "terrible 2's" are rarer than popular writings suggest and extreme child noncompliance in the late toddler and early preschool periods is more likely to reflect inappropriate child-rearing practices (Campbell, 1990:99). Willock (1983:389) states "Typically these children have experienced some form of inadequate parenting, ranging from insufficient, unempathic parenting combined with harsh physical punishment, all the way down to the grosser forms of neglect and abuse." Another reason why these early conduct problems are so enduring is the likelihood that poor family management practices, left untreated, will remain that way for lengthy periods of childhood [4].

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providing "fairly conclusive evidence linking early disruptive or aggressive behaviour to later aggressive, delinquent or antisocial behaviour."

[4] Sameroff (1993, p.8) quotes findings from the Rochester Longitudinal Study which found that "children who had poor family and social environments at 4 years of age still had them when they were 13 years old and probably would continue to have them for the foreseeable future."

Patterson and his colleagues have developed and provided empirical support for a social learning framework for understanding the role of parent-child relationships in the development of conduct problems (Patterson, 1982). The juxtaposition of a difficult child with an adverse rearing context initiates risk for the life-course-persistent pattern of antisocial behaviour. The ensuing process is a transactional one in which the challenge of coping with a difficult child evokes a chain of failed parent-child encounters (Moffitt, 1993, p.682). It is suggested that both negative and positive reinforcement play a role in the resulting escalation and maintenance of these coercive behaviours which then becomes a basis for training in aggression (Baum, 1989:185; Erickson, 1987:231; Forehand & McMahon,1981:5) [5]. As opposed to the negative affect often present in this conflicted form of caregiver-child relationship there is considerable evidence that a warm, positive bond between parent and child leads to a more socially competent child (Webster-Stratton & Dahl, 1995:341).

An early intervention strategy for preschool onset of conduct problems

It would appear that disruptive behaviour disorders are very enduring, however, many of the initial causes of these disorders operate during early childhood when more than at any other time in their lives the young child is both flexible in performance and dedicated to pleasing adults (Verville, 1985:viii). It is toward that developmental period that we need to shift resources if we are truly serious about combating what Loeber (1991:396) calls an "epidemic disorder in which youngsters victimize others and generally fail to live fulfilling lives." (Tremblay et al, 1994, 732). The challenge is for us to take mental health as seriously as we take physical health (Zeanah, 1993:ix) [6]. Here in Nova Scotia there is neither legal requirement nor coordinated commitment to identify or provide services for preschool children with mental health needs. Only visually and hearing impaired preschool children are legally entitled to services (Canning & Lyon, 1989:369) [7].

Since the early 1980s, operant learning models have strongly dominated the clinical study of child conduct disorders both in terms of their conceptualization and resulting treatment strategies (Speltz, 1990:400). Treatment within this model is almost always a caregiver-focused

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[5] Forehand & McMahon (1981:5) provide a useful exposition of this theoretical framework.

[6] The Health Department's National Health Research and Development Program in 1990-1 expended 4.2 million on mental health research while the Medical Research Council provided 26.5 million for research on the neurosciences alone.

[7] In the United States the Amendments to the Education for All Handicapped Children Act of 1986 (P.L.99-457) has been called "the most important legislation ever enacted for developmentally vulnerable young children" (Shonkoff & Meissels, 1990:19). Part H, a new discretionary program, facilitates the development of services to infants and toddlers with developmental delays or disabilities including psychosocial and self-help skills.

intervention following from the research indicating that parents of conduct disordered children have an underlying deficit in certain fundamental parenting skills. The purpose has been to reduce or eliminate the severity, duration and manifestation of the child's conduct problems through parent training in methods of behavioural control that follow directly from operant principles of reinforcement, punishment and extinction (Webster-Stratton & Dahl, 1995:343) [8].

Earlier reviews of training programs operating from this model demonstrated short-lived effects and limited generalization across settings (Speltz, 1990:400). However, interest among mental health professionals in the assessment and treatment of dysfunctional parent-child relationships has grown dramatically in recent years (Gerard, 1994:17) and in a recent review Webster-Stratton & Dahl (1995, p.344) have noted more success with these programs. In the short term parents have been successful in reducing children's levels of aggression and oppositional behaviours. Parents who undergo parent training are able to reduce children's levels of aggression by 20% to 60% (Patterson et al, 1982; Webster-Stratton, 1985). Generalization of behavioural improvements from the home to other important sites and situations in the child's life as well as to siblings has been demonstrated (Patterson et al, 1982; Webster-Stratton, 1990) as well as maintenance over time (1-4 years) (Webster-Stratton, 1984; Patterson & Fleischman, 1979; Baum & Forehand, 1981). Nonetheless, it would appear that for at least 1/3 of families these parent management strategies are not enough. Those families having less resources and supports and more personal issues, show fewer treatment gains and are more likely to show relapse and failure to maintain treatment effects (Webster-Stratton & Dahl, 1995, p.344). Parental social insularity is one factor which has been shown to be a strong predictor of failure to maintain treatment effects (McMahon & Forehand, 1988, p.143) [9]. This failure level is significant since families with fewer supports and more personal issues represent possibly the majority of the families with preschool age children with conduct problems presenting for help in Nova Scotia at family resource centres and day-care sites. It might be added that for the most part there are no meaningful services available for these families from the public sector.

Thus, it would appear that, while conflict reduction through contingency management is an important and perhaps necessary step in the treatment process, effecting change at the family-system level, for a significant proportion of families it may not have sufficient impact at the intra-psychic level of either child or parent to promote the young child's long-term adjustment or to enhance the quality of the child's relationships (Speltz, 1990:400; Webster-Stratton, 1990:149). It is now generally proposed that interventions aiming to change the course of disruptive behaviour for a wider range of family circumstances must focus upon modifying the different sources of influence that affect the development of antisocial behaviour. Multi-modal, intensive treatments that provide a range of services overtime are more likely to have a long

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[8] Webster-Stratton & Dahl (1995:343) provide a useful list of major parent-training models.

[9] In one study insular mothers only had a success rate of 50% in maintaining positive effects from parent training over a 1 year period. However, NONE of the mothers who were both insular and socioeconomically disadvantaged had a favourable outcome over the 1 year period (McMahon & Forehand, 1988, p.143).

at a theoretically crucial point in development are considered essential components of any multi-modal approach aiming to alter the long term developmental trajectory of young disruptive children (Tremblay et al, in press, p.4; King & Noshpitz, 1991:450). [10].

In developing the early intervention program presented in this paper an ecological framework (Zigler, 1990:xii; Bronfenbrenner, 1979) was adopted. Conduct problems of preschool children are conceived of as disorganization or maladaptation in the interrelationship between the child and their environment (Emde, Bingham & Harmon, 1993:226; Lyons-Ruth & Zeanah, 1993:30), with problems deriving "from within the child, from within the caregiver, from the 'unique' fit between child and caregiver or from the larger social context." (Zero to three, 1994:67). Each of these different sources of influence that affect the development of antisocial behaviour have been targeted for interventions within the overall program. Although the integration of behavioural and intra-psychically oriented clinical approaches is complicated by the very different epistemological models from which these two areas have developed there is great potential for the development of useful new family interventions based on multi-modal techniques blending these approaches (Speltz, 1990:399).

What follows is the outline of the assessment and intervention elements of the program as it is currently configured.

Assessment

a) screening

To be eligible for the program, children have to be between 30 - 72 months old at intake, with signs of early onset of severe conduct problems and a conflicted and maladaptive relationship with the primary caregiver. They further must be in good physical health and without signs of serious developmental delay, or severe psychiatric disorders.

b) program

Since the proposed multi-modal interventions target both the child and parent individually as well as their relationship and the broader social context, it is necessary to have measures for each of these components to help pinpoint specific clinical problems, help tailor the program to each families unique situation and provide pre-post as well as ongoing measures of intervention outcomes.

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[10] Webster-Stratton & Dahl (1995, p.344) discuss some of the elements of the next generation of intervention programs.

c) follow-up

It is important to be able to track maintenance of treatment effects and particularly the child's behaviours through to at least grade primary when it would be possible to gauge the child's adjustment to this important social setting as a useful evaluation measure in judging the success of the program in helping to alter the long term antisocial developmental trajectory.

Interventions

As noted above the program proposes multi-modal interventions targeting both the child and parent individually as well as their relationship and the broader social context. However, the core of the program focuses on the relationship between child and caregiver. The goal is to transform a pathogenic or non-supportive family system into one that is therapeutic resulting in a reduction in the child's presenting symptoms of noncompliance and lack of impulse control. Noncompliance and lack of impulse control are targeted because noncompliance is felt to be a keystone in the development of Conduct Disordered behaviour and lack of impulse control a universal component of antisocial behaviour (Loeber, 1990:2) [11] . The other components both intra-psychic and social, aid the robustness of the program by helping "strengthen" both caregiver and child, increasing the likelihood of achieving and maintaining positive effects with the core program across a wide range of family situations [12] .

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[11] Noncompliance appears to emerge early in the Conduct Disorder symptom progression and consequently appears to be an appropriate target for early intervention. According to Erickson (1987:231) "noncompliance has such serious ramifications for later behaviour and parent-child relationships that intervention should begin as soon as it is recognized by parents as a problem". Several investigators have reported reductions in other antisocial behaviour when noncompliance is treated (McMahon & Forehand, 1988:114) and Loeber (1990, p.2) feels that parenting training can have a positive impact on lack of impulse control.

[12] Webster-Stratton (1994:592) suggests that these forms of additional interventions "can strengthen the families protective factors, thereby mediating the disruptive effects of other more intractable risk factors such as socio-economic disadvantage and negative life stressors.

a) The relationship between child and caregiver

Phase 1 - didactic

This is a parent teaching component to help deal with faulty parental assumptions about child development that can help precipitate and maintain a conflicted relationship with the child.

Phase 2 - child-directed interaction

The intent of this component is to increase the child's level of control in the parent-child relationship, through the use of child-directed play sessions with parents. The parent is trained in this method of play not only to increase the amount of parent-child play interaction but also the extent to which the parent allows the child to control that interaction. In this way, both the "neglected" child (who has little interaction time with the parent) and the "enmeshed" child (who has frequent but excessively controlled interaction with parent) can benefit. It is felt that frequent child-directed play will provide the child with a means of caregiver regulation that does not depend for its elicitation on problem behaviour and may therefore strengthen the attachment, help reduce the level of conflict in the relationship and improve the chances of implementing the limit setting phase successfully.

Phase 3 - limit setting

This component involves training the primary caregiver in verbally and physically non-violent methods of limit setting. As the child-directed play is clearly "command-free" interaction, limit setting deals exclusively with transactions outside of play. This consistent limit-setting approach invites the child to make choices around their negative behaviours (eg. noncompliance) thereby not only encouraging compliant behaviour but also building impulse control.

b) within the child

This component of the program uses a child-centred play therapy approach [13]. Child-centred play therapy (for children 2.5 - 12) is based on the assumption that children as well as adults have within themselves, not only the ability to solve their own problems satisfactorily but also a striving for growth which makes mature behaviour more satisfying than immature behaviour. An illustration is the infant's drive to master walking as

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[13] Individually oriented play therapy seems to be making a popular resurgence as clinicians with behavioural and family systems orientations discover deficiencies in their skills and knowledge about working with children (Kissel, 1990:vii; McMahon, 1992:71).

opposed to crawling (Guerney, 1983:23). From a client centred perspective different kinds of maladjustments are viewed as different kinds of attempts to assert the frustrated expressions of an independent self, regardless of the form they take. The play therapy component is intended to encourage an emerging self-acceptance, independence and acceptance of others (Guerney, 1983:30) thereby supporting the core program.

c) within the caregiver

A cognitive and solution-focused counselling approach is used to focus on parent issues to help support the parent's resolve and ability to change their own attitudes and behaviours during the program and to maintain the positive changes and effects after the program is finished. Anger management training is sometimes used as a tool here. Another example for dealing with parents who get into a lot of rage behaviour with their children would be work with cognitions. It is hoped that parents would be able to recognize that their sometimes violent responses to their children are based on far more than the child's specific behaviours and rather that in many situations their responses may be driven by learning from past relationships of which their child's provocation is but a reminder. Although it is not expected to be able to resolve to any extent in a short intervention these deep-seated parental intra-psychic issues, it is hoped that this understanding will facilitate the parent learning to consciously make their child an exception to these old learnings.

d) the larger social context

Social isolation is often an important factor effecting the efficacy of the program. Where this is a problem parents are encouraged to work toward overcoming the isolation, for example, by enroling in Parent Resource Centre programs [14].

Program Schedule

The program is delivered "on-site" at the child-care setting or parent resource centre in order to meet accessibility and safety concerns as well as to deliver the interventions as close as possible to the occurrence of the problem behaviours. The program requires contact of 1.5 hours a week (1 hour for the parent and 0.5 hour for the child play session) for a period of 2 months with follow up sessions for a year.

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[14] Dunst & Trivette (1990) have an important article summarizing research findings in this area.

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